

What is Claimed is:

1. A network data communication system for a network data communication, comprising:
a first computer connected to a first network;
a second computer connected to a second network; and
a third computer connected to both of said first and second networks for establishing communication thereinbetween,

wherein said third computer includes a communication proxy having a proxy registration table and a communication proxy process for receiving a communication packet addressed to said second computer,

wherein said proxy registration table contains a network address of said second computer and communication parameters designating a communication method to be employed in communication between said communication proxy process and said second computer,

wherein said third computer searches said proxy registration table when a communication packet which is not addressed to said third computer is received, and

wherein when a destination network address of the communication packet is registered in said proxy registration table, the communication proxy process receives the communication packet and transmits the communication packet to the destination according to the communication method designated by said communication parameters registered in said proxy registration table.

2. The system according to claim 1, wherein said third computer has a communication proxy registration waiting daemon for forming the communication proxy, and said second computer instructs the communication proxy registration waiting daemon of the third computer to generate the communication proxy process for and instructs to register the network address of the second computer and the communication parameters to the proxy registration table.

3. The system according to claim 1, wherein when the communication proxy process receives a connection establishment request packet addressed to said second computer from said first

10051050-012203

1051050-012202

computer, said communication proxy process establishes a connection between the communication proxy process and said first computer and further establishes a connection between said communication proxy process and said second computer.

4. The system according to claim 1, wherein said communication proxy process sends a communication packet addressed from said second computer to said communication proxy process to said first computer.

5. The system according to claim 4, wherein when said second computer sends the communication packet address to said communication proxy process to said first computer, said communication proxy process rewrites a sender site network address of the communication packet to a network address of said second computer.

6. A third computer connected to both of a first network to which a first computer is connected and a second network to which a second computer is connected, comprising:
a registration table for registering a network address of said second computer;
means for searching the registration table when a communication packet which is not directed to said third computer is received;
a communication process for receiving a communication packet addressed to said second computer when a network address of a destination of the communication packet is registered in said registration table; and
means for transmitting the communication packet to the destination.

7. The third computer according to claim 6, further comprising means for generating the communication process,
wherein said third computer generates the communication process and registers the network address of said second computer to the registration table in accordance with a request from said second computer.

20251050 012202

8. The third computer according to claim 6, wherein when said communication process receives a connection establishment request packet directed from said first computer to said second computer, said communication process establishes a connection between said communication process and said first computer and further establishes a connection between said communication process and said second computer.

9. The third computer according to claim 6, wherein said communication process sends a communication packet directed from said second computer to said communication process to said first computer.

10. The third computer according to claim 9, wherein said communication process converts a sender site network address to a network address of said second computer when said second computer sends said communication packet addressed to the communication process to said first computer.